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PARK, CHAN S

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TERRY A. SMITH and JOHN F. MAUZEY

Appeal 2007-3103¹
Application 09/620,617
Technology Center 2600

Decided: January 3, 2007

Before: ROBERT E. NAPPI, JOHN A. JEFFERY and
KEVIN F. TURNER, *Administrative Patent Judges.*

TURNER, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from final rejections of claims 1, 5, 6, 8, 10-14, 18-20, and 22-25. We have jurisdiction under 35 U.S.C. § 6(b).

¹ Appeal No. 2007-2015 (non-precedential), was decided in connection with a related 09/620,957 application, where that application and this application have similar subject matter, the same inventorship and the same real party in interest. Differences between that opinion and the instant opinion are discussed below.

Appellants' application is directed to processes of printing forms using a printer, where forms indicate portions of page data that describe reoccurring images in the document. (Specification 2: 20-29).

Independent claim 1, representative of many of the independent claims, reads as follows:

1. A printer, comprising:

(a) an I/O port capable of receiving a plurality of commands describing a document, the commands including both a named sequence describing a form and an indicator; and

(b) means for responding to the indicator indicating permission is granted to print each instance of the form from the same video data by processing and printing the named sequence according to a first printing algorithm and for responding to the indicator indicating each instance of the form is to be printed from new video data by processing and printing the named sequence according to a second printing algorithm.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Suzuki	US 5,923,013	Jul. 13, 1999
Shimizu	US 6,052,202	Apr. 18, 2000
Mesa	US 6,512,591	Jan. 28, 2003

In addition, we rely on the following additional prior art reference to show unpatentability in a new grounds of rejection under 37 C.F.R.

§ 41.50(b):

Tsunekawa	US 6,734,989 B2	May 11, 2004
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ARGUMENTS AND ISSUES

The Examiner rejected claims 1, 5, 6, 8, 10-14, and 18-20 under 35 U.S.C. § 102(b) as anticipated by Suzuki. The Examiner also rejected claims 22-25 under 35 U.S.C. § 103(a) as unpatentable over Suzuki and Shimizu.

We consider Appellants' claims as standing or falling together in four groups based on the distinct rejections and arguments presented by Appellants, and we treat:

Claim 1 as a representative claim of Group I (claims 1, 5, 6, 14, and 18-20);

Claim 8 as a representative claim of Group II (claims 8 and 11);

Claim 10 as a representative claim of Group III (claims 10, 12, and 13); and

Claim 22 as a representative claim of Group IV (claims 22-25).

See 37 C.F.R. § 41.37(c)(1)(vii).

With respect to Group I, Appellants contend that the Examiner erred in indicating that claim 1 is anticipated by Suzuki. More specifically, Appellants have argued that the Examiner has misinterpreted the meaning of the claim term “form” and that Suzuki does not teach such a limitation. (Br. 5-7). The Examiner appears to find one aspect of Appellants' argument persuasive but finds that Suzuki teaches a “form” as interpreted in the rejection. (Answer 9-10).

ISSUE 1: Have Appellants shown that the Examiner erred in finding claim 1 anticipated in view of Suzuki?

With respect to Group II, Appellants contend that the Examiner erred in indicating that claim 8 is anticipated by Suzuki. More specifically,

Appellants have argued that Suzuki fails to teach the responding, converting and generating acts recited in claim 8. (Br. 7-8). The Examiner finds that Suzuki discloses both the generating and conversion of print data therein. (Answer 10-11).

ISSUE 2: Have Appellants shown that the Examiner erred in finding claim 8 anticipated in view of Suzuki?

With respect to Group III, Appellants contend that the Examiner erred in indicating that claim 10 is anticipated by Suzuki. More specifically, Appellants have argued that Suzuki fails to teach the responding, converting and converting acts recited in claim 10. (Br. 8-9). The Examiner finds that Suzuki discloses multiple conversions of print data therein, although the Examiner's arguments, in that section of the Answer, seem directed to Issue 2. (Answer 11-12).

ISSUE 3: Have Appellants shown that the Examiner erred in finding claim 10 anticipated in view of Suzuki?

With respect to Group IV, Appellants contend that the Examiner erred in misinterpreting the meaning of the claim term "form" and finding that Suzuki teaches such a limitation. (Br. 5-7). The Examiner appears to find one aspect of Appellants' argument persuasive but finds that Suzuki teaches a "form" as interpreted by the Examiner. (Answer 9-10).

ISSUE 4: Have Appellants shown that the Examiner erred in finding claim 22 obvious in view of Suzuki and Shimizu?

We reverse and enter a new ground of rejection.

FINDINGS OF FACT

1. As disclosed in the instant application, a printer that includes a means for responding to an indication to print each instance of a form from the same video data according to a first printing algorithm and for responding to an indication to print each instance of the form from new video data according to a second printing algorithm. A printer control unit, operating under the direction of printer firmware program allows for the correct algorithm to be selected and used. (Specification 7: 20-22; 8: 10-14; Figs. 3 and 4, elements 350, 367 and 408).

2. The Specification defines a “form” as an image that occurs more than once in a document. The Specification also recites that “[a]n example of a form may be a company letterhead or a company logo that occurs on each page in a document.” The Specification also defines a “named sequence” as a set of PDL commands that describe a form. (Specification: 1: 17-25; Fig. 2, elements 202, 204, 206 and 208).

3. Based on parameters set, the Specification discloses that “whenever video data is required to print an instance of the form, the display list data stored at step 504 is accessed from the RAM 356 and rendered by using the RIP 370.” This is contrasted with another algorithm that generates new video data for each instance of the form. (Specification 8: 1-18).

4. Suzuki discloses a print control system that manages a print job on a job basis and on a page basis. A job description file contains the attribute of the entire job and a job content list, where a job control module extracts necessary image data according to the job element list and sends it to a printer. (Col. 9, ll. 33-39; col. 10, ll. 35-39; col. 11, ll. 2-9; col. 12, ll. 10-28; Figs. 4 and 12, elements 54, 56, 76, and 114).

5. The Examiner finds that the printing using a job description as disclosed in Suzuki, where, for example, multiple copies of pages from a document are printed, is analogous to the printing of forms as described and claimed in Appellants' application. (Answer 3; Suzuki: Col. 9, ll. 33-39; Figs. 5, 24 and 35).

6. Shimizu discloses an information processing apparatus that determines a default value of the memory to be used so that adequate available memory can be utilized. Background information indicates the pattern to be given to the mask, where the background includes a background pattern given to the mask without image repetition and a tile pattern in which a pattern is repeated in the vertical and horizontal directions. While the reference does disclose background patterns, it does not appear to treat background and foreground images separately. (Col. 14, ll. 9-12 and 29-53; col. 15, ll. 17-28).

7. Tsunekawa discloses that the printing of documents can include standard form data and non-standard data which are superposed. The standard form data has the same content over a plurality of pages and the non-standard data has content that differs on every page. Tsunekawa discloses a printer that has a control unit that is in communication with a host computer through an interface and where the control unit acts to control the operations of a print engine. (Col. 1, ll. 9-17; Fig. 2, elements 101, 200, 208 and 210).

8. Tsunekawa discloses that the control program includes an overlay registration/readout unit which registers the form data, which is described in page description language, in RAM and reads out the form data when a form

overlay draw instruction is received. The control program further includes a form memory management unit for storing and retaining the form image data. Management information for identifying the form data also is stored in the working memory, where the management information includes a form ID. An ordinary page object other than a form is drawn on the developed image data, the images are combined by designated logic and the result is printed. In a case where the form data is not in the format of page description language but is transmitted as image data, processing for developing the form data into raster data is eliminated and it will suffice to encode the data as is and store the encoded data in memory. (Col. 5, ll. 33-42; col. 7, ll. 38-41; col. 10, ll. 16-30).

PRINCIPLES OF LAW

It is axiomatic that anticipation of a claim under § 102 can be found if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984). In rejecting claims under 35 U.S.C. § 102, a single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992).

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If that burden is met, then the burden shifts to the Appellants to overcome the

prima facie case with argument and/or evidence. *In re Mayne*, 104 F.3d 1339, 1342 (Fed. Cir. 1997).

“When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.” *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). “Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007).

The claims on appeal should not be confined to specific embodiments described in the Specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (*en banc*). During *ex parte* prosecution, claims must be interpreted as broadly as their terms reasonably allow since applicants have the power during the administrative process to amend the claims to avoid the prior art. *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989).

ANALYSIS

Appellants argue that the claim term “form” is defined in the Specification and that the Examiner has misinterpreted it to mean images that occur only once in a document. Appellants also argue that the Examiner has misinterpreted Fig. 2 of the Specification. In the Answer, the Examiner acknowledges that Appellants’ argument is persuasive, (Answer 9), but maintains the rejection because the Examiner indicates that the term form was interpreted “as it is defined in the Specification in rejecting the claims.”

(Answer 9). As discussed below, we do not agree with the Examiner's interpretation of this claim term.

Appellants also argue that Suzuki fails to teach the processing of an image that occurs more than once in a document. Appellants argue that omitting pages to be printed from a document or printing pages out of sequence is not the same as applying particular processing to forms that occur in a document. The Examiner responds by pointing out that page image data, in Suzuki, can be printed multiple times in a document and this provides the functionality required in the claims. We do not agree.

The Specification defines a "form" as an image that occurs more than once in a document. The example cited in the Specification is an image that occurs on each page in a document. (Finding of Fact 2). From such a description, we do not find that one of ordinary skill in the art finds the limitation "form" to be analogous to page image data, as the Examiner suggests. What the definition suggests is that a form is an image that occurs on multiple pages of a document and that would preclude page image data being analogous to a "form." Claim 1 recites, in part, "responding to the indicator indicating permission is granted to print each instance of the form from the same video data by processing and printing the named sequence according to a first printing algorithm." We find that Suzuki does not teach or suggest the functionality of handling instances of forms in documents based on command indicators. As such, we do not affirm the rejection of the Group I claims.

With respect to claims 8 and 10, and the claims of Groups II and III, Appellants argue that Suzuki fails to disclose responding to an indicator and

then converting the sequence into video data or generating new video data for each instance. Appellants also argue that Suzuki fails to disclose responding to an indicator and then converting the sequence into video data or converting the sequence into display list data. Appellants argue that Suzuki's disclosure of print jobs saved before or after raster image processing (RIP) is not analogous to the functionality specified in claims 8 and 10.

The Examiner points out that claims 8 and 10 detail that "permission is granted," and finds that by saving the print job before or after RIP, after printing the job, permission is granted to print the job again. However, even if this is accepted, we do not find that this is analogous to the generating and converting, or multiple converting steps found in claims 8 and 10. As such, we do not affirm the rejection of the claims of Groups II and III.

Appellants do not separately argue the patentability of the claims of Group IV, other than the arguments raised about the definition and use of the limitation "form." With respect to the claims of Group IV, rejected over Suzuki and Shimizu, we do not find that the combination cures the deficiencies of the anticipation rejection. Shimizu discloses background patterns, but it does not appear to treat background and foreground images separately, and does not provide separate functionality for the printing of forms, as required by claims 22-25. (Finding of Fact 6). As such, we do not affirm the rejection of claims 22-25.²

² With respect to the above-noted, related Appeal No. 2007-2015, our findings and result regarding Suzuki differ from the opinion in that case in that the arguments raised by Appellants are different in this opinion than in the former opinion. In the former opinion, since Appellants made no distinguishing remarks with respect to the limitation "form," we presume

New Grounds of Rejection Under 37 C.F.R. § 41.50(b)

At Least the Independent Claims 1, 8, 10, and 14 are Unpatentable Over the Teachings of Tsunekawa

Claims 1, 8, 10, and 14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Tsunekawa.

As discussed above, (Findings of Fact 7 and 8), Tsunekawa teaches the printing of forms and other data, where the limitation “form,” from the independent claims, is an equivalent. Forms are described in page description language and are assigned form IDs. While the interface of the printer in Tsunekawa does not receive the form ID, but rather generates it, we find that such a distinction to be obvious. One of ordinary skill in the art at the time the invention was conceived could have sent the forms in the page description language along with an ID, instead of it being assigned.

Tsunekawa also discloses that form sections can be printed from the previously used image data for the form. Alternatively, form data can be transmitted as image data, where the process for developing the form data into raster data is eliminated and the data is stored in memory. Based on these multiple modes of operation, we find the claimed processing of the named sequence based on alternate algorithms selected through the indicator would have been obvious in view of Tsunekawa. One of ordinary skill in the art could have treated the form data differently, using the same or newly created image data. Additionally, Tsunekawa does not explicitly disclose that such arguments were waived in that case. *See* 37 C.F.R. §41.37(c)(1)(vii). In the instant case, however, Appellants raised issues with respect to the limitation “form” that we find to be compelling and dispositive.

the conversion of the named sequence into display list data, as recited in claim 10, but we find the conversions performed on the page description language, (Finding of Fact 8), to be equivalent to the process of forming display list data in a printer. We find that all of the elements of claims 1, 8, 10 and 14 are taught or suggested by the disclosure of Tsunekawa and reject those claims as being obvious under 35 U.S.C. § 103(a).

CONCLUSION OF LAW

We conclude that Appellants have shown that the Examiner erred in rejecting claims 1, 5, 6, 8, 10-14, 18-20, and 22-25 and we enter a new ground of rejection finding that independent claims 1, 8, 10, and 14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Tsunekawa.

DECISION

We have reversed the Examiner's rejection for all claims on appeal. However, we have entered new grounds of rejection under 37 C.F.R. § 41.50(b) for independent claims 1, 8, 10, and 14. Although we decline to reject every claim under our discretionary authority under 37 C.F.R. 41.50(b), we emphasize that our decision does not mean the remaining claims are patentable. Rather, we merely leave the patentability determination of these claims to the Examiner. *See* MPEP § 1213.02.

¹ This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)).

37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

REVERSED

Appeal 2007-3103
Application 09/620,617

Tdl/gw

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